

Cedar Chemical

AFIN#: 54-00068

January 2008 Groundwater Sampling by Geomatrix Activity Summary by Clark McWilliams

January 7, 2008

Attendees: Clayton Bell (713.460.5892) and Charles Young of Geomatrix (Houston, TX), Xavier Nehus (501.316.3832) of Site Environmental & Acquisition Services (SEAS), Clark McWilliams (ADEQ)

Weather: Cloudy, windy 60's, occasion sprinkle

Onsite 8:40 am. Geomatrix representatives onsite preparing. SEAS arrived approx. 9:30 a.m.

Water levels measured in all onsite monitoring wells (mw) during the a.m. Old mw marked as "UNK #" Ten (10) such mw's labeled (UNK -1 thru UNK 10). UNK 1 next to 2MW-6, UNK 2 next to EMW-4, UNK 3 and 4 next to EMW-6 cluster, UNK 5 next to EMW-7, UNK 6 east of Unit #5 (labeled as piezometer in older site drawings), UNK 7 and 8 next to EMW-3 cluster, UNK 9 and 10 next to EMW-2 cluster. Existing labeled mw's of unknown construction to be camera'ed. Camera work accomplished in pm.

Mw's camera'ed and screen length (distance from mark on top of the well riser):

EMW-6: 73' - 82' (silted bottom)	EMW-6a: 43' - 51' (silted bottom)
EMW-6b: 23' - 31' (silted bottom)	EMW-6c: 13' - 17.5' (no silt)
EMW-2: 27.5' - 35.7'	EMW-3: 28' - 38'
2MW-1: 17' - 27'	EMW-7: 35.5 - 45.5'
EMW-1: 28' - 38'	EMW-4: 28' - 36'

Number of groundwater (gw) mw's to actually sample unclear to samplers. They arrived with understanding that all 38 wells would be sampled. Resolved through phone calls with their office. 25 mw's planned to be sampled.

January 8, 2008

Weather: Cloudy, 60's - 50's, very windy from south. T'storm pm - work delayed about 1.5hr. Work continued in light rain.

Plan by Geomatrix field personnel is to redevelop the mw's to be sampled, then to use low sampling methods to obtain samples. Sampling has 24hr limit from actual sample collection to arrival at laboratory in Austin, TX (Test America) due to the special analysis for nitrates, sulfites, and hexavalent chromium as per Geomatrix. Current Geomatrix

plan is to sample and transport samples to Memphis airport FedEx each day of sampling.

Onsite mw EMW-6, -6a, -6b, -6c, 4MW-4, 2MW-1 and 2MW-4 developed. Water containerized in 55gal drums for each mw and labeled with hazardous waste sticker. Drums being stored in small metal building next to warehouse south of Unit #4.

Mw lock situation reviewed. All mw outside fenced areas have locks. Onsite labeled UNK 3,4,5,7,9, and 10 have no locks.

January 9, 2008

Weather: Cool and clear (50's)

Well development continued in a.m.. New plan is to develop mw's in a.m. and conduct sampling in p.m.

Mw's EMW-2, 9MW-1, 2MW-5 and 2MW-2 developed in a.m. 9MW-1 contained black and then yellow colored water initially, 2MW-2 made little water and very turbid – easy to pump dry

Number and amount of sampling containers in question. Resolved between Geomatrix (field personnel and office) and laboratory in early p.m. Example; duplicate samples to be collected 1 in 20 samples. Minimum of one duplicate per 10 samples and one duplicate per day not being utilized. Total of 18 containers to be utilized for each mw: 9 – Volatile Organic Compounds (VOCs) 40 ml vials, 6 – Semi-VOCs (SVOCs) -1L amber containers, and 3 – metals 250 ml plastic containers

Mw's EMW-6, -6a, -6b, and -6c sampled in p.m. Low flow sampling techniques (approx 150 ml/min). Some longer time for gw field parameters to stabilize in EMW-6b and 6c. EMW-6 stabilized quickly. Comments made that turbidity parameter of the instrument package being used often recorded very higher readings. When compared to another turbidity instrument at another project, the comparing instrument was lower as expected. MW-6c (very shallow well) was sampled with bailer because of the lack of water - low flow method not applicable. EMW-6c SVOC, and chromium samples very turbid. Sampling ended after 7 p.m..